

REMARKS

In view of the above amendments and the following remarks, reconsideration and further examination are respectfully requested.

I. Telephone Interview

The Applicants would like to thank Examiner Musa for granting and conducting a telephone interview on September 10, 2009. During the interview the Examiner kindly suggested clarifying the limitations related to the disabling of the router function in order to prevent a loop path. Further, the Examiner indicated further search and/or consideration would be required upon receiving such amendments, since the previously relied upon portions of the Kanekar and Beatty references would most likely be overcome.

II. Amendments to the Claims

In view of the above-identified suggestions by the Examiner, independent claims 43 and 48 have been amended to clarify features of the invention recited therein and to further distinguish the present invention from the references relied upon in the rejections discussed below.

Specifically, independent claims 43 and 48 have been amended to clarify the method steps and the structure of the first routing device, and to also clarify the determining of a number of detected master routers and the disabling of the router function. Applicants submit that these amendments distinguish the claimed invention from the Kanekar and Beatty references.

III. 35 U.S.C. § 103(a) Rejections

Claims 43-58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kanekar and Beatty. Further, claim 59 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kanekar, Beatty and Fukushima. These rejections are believed clearly inapplicable to amended independent claims 43 and 48 and the claims that depend therefrom for the following reasons.

Amended independent claim 43 recites a method of starting a first routing device connecting a plurality of networks to which a plurality of routing devices are connected. Claim 43 recites that master router data is stored (for each network) by each routing device and the master router data indicates whether the respective routing device is a master router or a slave router with respect to each network to which the respective routing device is connected. Further, claim 43 recites that, with respect to each network, one of the routing devices connected thereto that is also connected to a network nearer to a parent router (which assigns network identification data to identify the networks) is the master router. In addition, claim 43 recites that, with respect to each network, one or more of the routing devices connected thereto that is not connected to the network nearer to the parent router, is the slave router.

The Kanekar and Beatty references, or any combination thereof fails to disclose or suggest the above-mentioned structural relationship of the network (i.e., the relationship between the master routers and the slave routers) identified by the master router data, as recited in independent claim 43.

Rather, Kanekar merely teaches that a slave router serves as a backup device upon a failure of the master router, wherein the slave router must have the same placement in the

network environment as the master router in order to be able to serve as the backup for the master router (see Figs. 3, 5, 8, 9 and 14; Abstract; and cols. 15 and 16). Specifically, Kanekar teaches that the master router and the slave router have an identical structural placement within the networks.

Thus, in view of the above, it is clear that Kanekar teaches that the master router and the slave router have the same structural placement within the network environment, but fails to disclose or suggest that the master router data (stored by each router) indicates whether the respective routing device is a master router or a slave router with respect to each network to which the respective routing device is connected, as required by claim 43.

Furthermore, it is apparent that Kanekar requires that the master router and the slave router are identically arranged in the network environment, but Kanekar fails to disclose or suggest that (i), with respect to each network, one of the routing devices connected thereto that is also connected to a network nearer to a parent router (which assigns network identification data to identify the networks) is the master router, and (ii), with respect to each network, one or more of the routing devices connected thereto that is not connected to the network nearer to the parent router, is the slave router, as recited in claim 43.

In other words, Kanekar's disclosure of the master router and the slave router being identically arranged in the network, is not a disclosure or suggestion of the structural differences between master router and the slave router, as required by claim 43.

Now turning to Beatty, the Applicants note that Beatty is related to parallel execution of a complex task in a computer and is not related to control of a router on a network, as recited in claim 43. Specifically, Beatty teaches that (a) a "master process" is a task on the computer that

schedules operations to be performed by a “slave process,” (b) the “slave process” is a process that performs the actual operations (see col. 4, lines 13-17).

Thus, in view of the above, it is apparent that Beatty merely teaches that master and slave processes are executed on a computer, but fails to disclose or suggest that (i) the master router data (stored by each router) indicates whether the respective routing device is a master router or a slave router with respect to each network to which the respective routing device is connected, (ii) with respect to each network, one of the routing devices connected thereto that is also connected to a network nearer to a parent router (which assigns network identification data to identify the networks) is the master router, and (iii), with respect to each network, one or more of the routing devices connected thereto that is not connected to the network nearer to the parent router, is the slave router, as recited in claim 43.

Amended independent claim 43 also recites determining, from acquired master router data, a number of detected master routers connected to the networks to which the first routing device is connected. In addition, the method of claim 43 includes disabling a router function of the first routing device when, in relation to the networks to which the first routing device is connected, the determined number of detected master routers is zero or two or more. Finally, claim 43 recites that the routing function of the first routing device allows the first routing device to connect to a network, such that when the router function is disabled, the first routing device cannot connect to the network.

In the Office Action, the Examiner acknowledges that Kanekar fails to teach the claimed disabling of the router function, as previously recited in claim 43. Further, the present rejection relies on Beatty for teaching the limitations related to the disabling of the router function, which are admittedly lacking from Kanekar.

However, as mentioned above, Beatty merely teaches that (a) a “master process” is a task on the computer that schedules operations to be performed by a “slave process,” (b) the “slave process” is a process that performs the actual operations (see col. 4, lines 13-17).

Initially, the Applicants note that Beatty is not related to control of a router on a network, but is merely related to master/slave processes executed on a computer. Therefore, Beatty is not related to the same endeavor as the invention of claim 43, but only shares similarities in the naming conventions (i.e., “master” and “slave”). Therefore, a person skilled in the art of the claimed invention (i.e., start-up method of a router upon connection of the router to a network) would not arrive at the claimed invention based on Beatty’s disclosure of scheduling and executing a complex task on a computer. For this reason alone, Beatty should be removed as prior art.

Furthermore, in view of the above, it is clear that Beatty merely teaches that on a computer a “master process” schedules operations to be executed by a “slave process,” and does not disclose or suggest (i) determining, from acquired master router data, a number of detected master routers connected to the networks to which the first routing device is connected, and (ii) disabling a router function (routing function allows the first routing device to connect to a network, such that when the router function is disabled, the first routing device cannot connect to the network) of the first routing device when, in relation to the networks to which the first routing device is connected, the determined number of detected master routers is zero or two or more, as required by claim 43.

Therefore, because of the above-mentioned distinctions it is believed clear that independent claim 43 and claims 44-47 and 49-59 that depend therefrom would not have been obvious or result from the combination of Kanekar and Beatty.

Furthermore, there is no disclosure or suggestion in Kanekar and/or Beatty or elsewhere in the prior art of record which would have caused a person of ordinary skill in the art to modify Kanekar and/or Beatty to obtain the invention of independent claim 43. Accordingly, it is respectfully submitted that independent claim 43 and claims 44-47 and 49-59 which depend therefrom are clearly allowable over the prior art of record.

Independent claim 48 recites a first routing device which includes limitations that correspond to the above-mentioned distinguishing features of independent claim 43. Thus, for the same reasons discussed above, it is respectfully submitted that claim 48 is allowable over the combination of Kanekar and/or Beatty.

Regarding dependent claim 59, which was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanekar and Beatty in view of Fukushima, it is respectfully submitted that Fukushima does not disclose or suggest the above-discussed features of independent claim 43 which are lacking from the Kanekar and Beatty references. Therefore, no obvious combination of Kanekar and Beatty with Fukushima would result in, or otherwise render obvious, the invention recited independent claim 43 and the claims that depend therefrom.

IV. Conclusion

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance and an early notification thereof is earnestly requested. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

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